CLAIM LISTING

1-4. (canceled)

5. (currently amended) A method of assigning an optimum system control parameter to a mobile station in a wireless communications system having one or more transceivers, comprising the steps of:

dividing the coverage area of the communications system into a plurality of defined geographic regions irrespective of the locations of the one or more transceivers;

assigning a code to each of the geographic regions irrespective of the locations of the one or more transceivers, wherein the code corresponds to a system control parameter optimized for that geographic region;

locating a mobile station as being within a first geographic region of the plurality of defined geographic regions; ~~and~~

providing the mobile station with the code for the first geographic region and the corresponding system control parameter optimized for the first geographic region;

locating the mobile station as being within a second geographic region of the plurality of defined geographic regions;

comparing the code assigned to the second geographic region with the code assigned to the first geographic region; and

providing the mobile station with the code for the second geographic region and the corresponding system control parameter optimized for the second geographic region if, during the step of comparing, the code assigned to the first geographic

region is different from the code assigned to the second geographic region.

6. (canceled)

7. (original) The method of claim 5, wherein the plurality of defined geographic regions are defined by one of location estimates and grid elements.

8. (original) The method of claim 5, wherein the system control parameter is one of a neighbor list of optimum hand-off candidates, a power control threshold, a handover threshold and a handover timer.

9-18. (canceled)

19. (currently amended) A mobile station capable of communicating with one or more base stations within a communication system providing wireless communication in a coverage area, the mobile station comprising:

means for being located within one of a plurality of regions each corresponding to location estimates independent of the one or more base stations, wherein the plurality of regions together comprise a reference frame applied to the coverage area; ~~and~~

means for receiving a code corresponding to a system control parameter optimized for the region the mobile station is currently located; and

means for updating the system control parameter, wherein the means for updating the system control parameter comprises:

means for comparing a first code assigned to a first region of the plurality of regions with a second code assigned to a second region of the plurality of regions; and

means for determining if the first code is equivalent to the second code,

wherein the means for receiving a code includes means for receiving a second system control parameter in response to the means for determining if the first code is equivalent to the second code.

20. (currently amended) The mobile station of claim 19, further comprising means for retaining the system control parameter, wherein the means for retaining the system control parameter comprises a flash memory module.

21-24. (canceled)

25. (currently amended) The mobile station of claim 19 ~~24~~, wherein the first region is a region of the plurality of regions in which the mobile station is currently located and the second region is a region of the plurality of regions in which the mobile station was previously located.

26. (original) The mobile station of claim 25, wherein the second code is the code currently assigned to the mobile station.

27. (original) The mobile station of claim 19, further comprising means for performing pilot scanning.

28. (original) The mobile station of claim 19, further comprising means for merging two or more system control parameters.

29. (original) The method of claim 19, wherein the reference frame is one of a set of geographic coordinates and a grid, wherein the plurality of regions are grid elements.

30. (original) The method of claim 19, wherein each of the plurality of regions accounts for a variance in the location estimate.

31. (original) The method of claim 19, wherein the system control parameter is one of a neighbor list of hand-off candidate cells, a handover timer, a handover threshold and a power control threshold.

32. (original) In a communication system providing wireless communication in a coverage area, a method of providing neighbor lists to a mobile station optimized for the mobile station's location in order to aid in hand-offs between a plurality of transceivers, the method comprising:

assigning a first code to a first region, the first region being defined irrespective of the plurality transceivers' locations, wherein the first code corresponds to a neighbor list optimized for the first region;

assigning a second code to a second region, the second region being defined irrespective of the plurality of transceivers' locations, wherein the second code corresponds to a neighbor list optimized for the second region;

comparing the first code assigned to the first region with the second code assigned to the second region;

merging the neighbor lists corresponding to the first and second regions if the first code assigned to the first region is different from the second code assigned to the second region, resulting in a merged list; and

providing the merged list to a mobile station located in the first region.

33. (original) The method of claim 32, wherein the second region is adjacent to the first region.

34. (original) The method of claim 32, wherein the first and second regions are grid elements.

35. (original) The method of claim 32, wherein the wireless communication system is code division multiple access (CDMA) cellular system.

36. (original) The method of claim 32, wherein the first and second regions correspond to location estimates.

37. (original) The method of claim 36, wherein the first and second regions account for a variance in the location estimate.

38. (original) A method of building and optimizing system control parameters for a cellular communications system having a plurality of base stations and a plurality of receiving locations irrespective of the locations of the plurality of base stations wherein each of the plurality of receiving locations is assigned a code corresponding to a unique set of system control parameters, the method comprising:

identifying a first set assigned to a first receiving location of the plurality of receiving locations as being unique or equivalent as compared to a second set assigned to a second receiving location of the plurality of receiving locations;

receiving at the first receiving location a signal within an add-threshold level from a base station;

adding the signal to the first set creating an updated set;

comparing the updated set to the second set; and

determining a code to be associated with the first receiving location after the step of comparing.

39. (original) The method of claim 38, wherein the step of determining a code to be associated with the first receiving location comprises:

modifying the first code associated with the first receiving location, comprising the steps of:

changing the first code to correspond to the code of the second receiving location if, during the step of identifying, the first set was identified as being unique, and if, during the step of comparing, the updated list is equivalent to the second set; and

associating a new unique code with the first receiving location if, during the step of identifying, the first set was identified as being equivalent, and if, during the step of comparing, the updated set was unique as compared to the second set.

40. (original) The method of claim 38, wherein the threshold signal is one of an add-threshold signal and a pilot measurement that exceeds a threshold.

41. (original) The method of claim 38, wherein the plurality of receiving locations are one of grid elements and location estimates.

42. (original) The method of claim 38, wherein the system control parameter is one of a neighbor list of hand-off candidate cells, a handover timer, a handover threshold and a power control threshold.

43-52. (canceled)